IDEC Introduces Category 2 Safety Relay Module

Designed specifically to comply with updated ISO 13849 Safety Category 2 requirements, this safety relay module helps users economically apply better and more appropriate safety measures.

I_DEC Corporation, Sunnyvale, CA, March 2, 2021 — IDEC Corporation announces the release of its new HR5S safety relay module. This latest addition to IDEC’s family of safety devices gives designers and OEMs more options to provide better end user safety while cutting costs and improving the productivity of machines and equipment. The HR5S safety relay module is the first on the market designed specifically to meet ISO 13849 Category 2 requirements.

Designed for Safety Category 2 Applications
Safety relay modules, like the HR5S, are a key component for interlocking equipment and driving it to the safest possible state in case an emergency stop pushbutton or other safety input signal is activated. If designers are using a system with Safety Category 3 or 4, then redundant safety inputs, controllers, and outputs must be provided.

When Safety Category 2 is acceptable, then only single input connections, less expensive safety relays, and single outputs are needed. Fewer and less-specialized components can be used, control panel space is saved, and field wiring is decreased. Design, installation, testing, and support efforts are also minimized.

Comply with Updated Standards
Machinery and OEM builders design safety into their equipment following the ISO 13849 “Safety of machinery”, which was updated a few years ago to clarify Category 2 requirements so interpretation is easier for users. Now when the machine risk is relatively low, OEM designers can opt for a more streamlined safety implementation by using Category 2 instead of a more rigorous safety implementation using Category 3 or 4.
IDEC’s new HR5S safety relay modules specifically comply with Category 2 requirements, increasing designer flexibility when the required performance level (PLr) risk assessment identifies conditions to be PLc or below. While categories 3 or 4 mandate redundancy, Category 2 allows a more straightforward safety implementation where “testing occurs immediately upon demand of the safety function”.

**Easy to Specify and Install**

HR5S safety relays are available in three configurations for a range of applications. The Simple type can be used for applications up to PLc, while Standard and Off-Delay types work for designs up to PLd and add failure detection features. While most Category 3 and higher relays consume 45mm of installation width, the HR5S is only 22.5mm wide and can be mounted on DIN rails or a backpanel surface.

Push-in terminals are used for ease of installation and vibration resistance, accepting solid wires up to 16 AWG or stranded wires up to 18 AWG with ferrules. Inputs are rated for 24V DC, and outputs are rated up to 250V AC 3A. The HR5S safety relay modules comply with many standards including EN ISO 13849-1:2015 and UL 508.

**More Applications, Improved Productivity**

HR5S safety relays make it easier and more economical for machine builders and OEMs to apply approved safety designs in additional applications, for new systems and also for retrofit cases. In addition to these opportunities, Category 2 designs and safety relays can be used to warn users of impending issues instead of automatically stopping equipment, providing productivity gains through increased uptime. In conjunction with the recently released HR6S safety module which meets Safety Category 1, 3, and 4 requirements, IDEC becomes the only supplier in the world able to supply safety relay modules for all applications ranging from Safety Category 1 through Category 4.

As with all its products, IDEC offers free tech support for the HR5S, with no service or support contract required. For complete specifications or additional information, please contact IDEC Corporation at 800-262-IDEC (4332), or visit us online at [www.idec.com/safety](http://www.idec.com/safety).

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**About IDEC:** IDEC Corporation is a global supplier that has provided innovative and reliable industrial automation and control products since 1945. Covering a broad range of market needs, these feature-rich and value-driven products include PLCs, human machine interfaces (HMIs), safety products and other industrial automation components. By delivering world-class products backed by personalized service and highly-rated technical support, IDEC enables design engineers to create lean, cost-effective and safe solutions to optimize their automation applications. With the recent acquisition of APEM, one of the world’s leading manufacturers of operator interface panels and related components, IDEC continues to enhance our customers’ ability to create high-quality solutions. For additional information, visit [https://us.idec.com/](https://us.idec.com/)

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